NPDES COMPLIANCE INSPECTION REPORT
PUGET SOUND NAVAL SHIPYARD
BREMERTON, WASHINGTON

FACILITY: Puget Sound Naval Shipyard
1400 Farragut Avenue
Bremerton, Washington 98314-5001

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NPDES PERMIT: WA-000206-2
Effective Date: April 1, 1994
Expiration Date: April 1, 1999

INSPECTION DATE: January 7-8, 2009
(Entry: 08:00 a.m.)
(Exit: 15:45 p.m.)
(Entry: 08:00 a.m.)
(Exit: 14:45 p.m.)

REPORT DATE: January 7-8, 2009

GIS DATA: N 47 56212
W 22.63729
File #11
This was taken from HQ command bldg

SIC: **4952**

INSPECTOR: Eileen Hileman, Inspector
Environmental Services Unit
Office of Environmental Assessment
EPA Region 10

Note to program: The facility requires all personnel entering the shipyards to wear steel-toed boots, safety glasses and hard hat. Safety hazards include machinery, mobile equipment, dust, grit. The facility also does not allow photography equipment of any kind (including cell phones). The facility also prohibits any person from carrying a personal cell phone. If you want photographs as part of the inspection, the facility (if notified in advance), will provide a photographer. Photographs are developed and sent to Washington D.C. for review (to insure there are no security issues) and then returned to

BACKGROUND

The Puget Sound Naval Shipyard (PSNS) occupies over 354 acres on the waterfront of Bremerton, Washington. It includes six dry docks, more than a dozen piers, moorings, and multiple buildings. PSNS employs the largest workforce in Kitsap County. The main operations at this facility include the overhaul, alteration, repair, maintenance, and dry-docking of surface ships and submarines. PSNS is also homeport for a number of Navy ships. Recently, the primary activity at the shipyard has been dismantling and recycling of nuclear submarines. A copy of the general layout diagram is appended to this inspection report as Attachment I.

Several years ago (after the permit re-application was sent to EPA) the Navy reorganized this facility. All buildings, structures, docks, utilities, sewer system, etc. are now owned by the Command Naval Installation. The Command Naval Installation also has responsibility for maintenance of these facilities and all related equipment. NAVSEA (which is an entirely different organization) is tasked with operations (environmental compliance, operations inside the docks, etc.). This reorganization impacts the current administratively extended permit as well as any permits issued in the future in that this new structure means that the only level at which these two Commands intersect is at the level of the Secretary of the Navy. Recent case in point – several of the violations noted in the most recent NOV issued to this facility involved maintenance issues at the Steam Plant. The environmental group has no control over maintenance at the steam plant as maintenance falls under an entirely separate command. The issue is being initially addressed by having the Commander of NAVSEA sent a letter to the Command Naval Installation. However, cooperation in address the matter lies in the hands of the Commander at Command Naval Installation not at NAVSEA (where the Environmental Compliance Unit is housed). While I am certain both Commands are committed to environmental compliance the difficulty of trying to use one permit to address issues of operation and maintenance in one permit as well as storm water, etc. will be difficult.

COMPLIANCE HISTORY

This facility was last inspected by EPA Region 10 in 2008. This facility has had an administratively extended permit since 1999. A new draft permit is in the initial stages and a copy of the new draft permit has been shared with the facility and the facility has provided comments to EPA.

ENTRY/INTRODUCTION

On Wednesday, January 7, 2009, I entered the facility at 08:30 a.m. accompanied by Gerald Sherrill who met me at the Pass and ID office and accompanied me through the gates of the facility. Upon arrival at Mr. Beckwith's office, I was directed to the conference room were I was joined by Bruce Beckwith, Water Program Manager; Gerald M. Sherrell; Eric Beckley; Steven S. Rupp; Karen Claven; Eric Mollerstuen; Frank Hnatovic, QA Manager Laboratory Division; Allison Rhoads; Lawrence Edwards; Mark Sage; and Timothy Brorson. I presented my credentials to all those present explained my intention to conduct an NPDES compliance evaluation inspection and then a CFC inspection of the facility. I also explained that these inspections would be part of the multi-media inspection event that began in December 08. The

facility had been notified in advance that I would be conducting this inspection. After a brief overview by Mr. Beckwith, I requested to begin the inspection with a file review.

RECORDS REVIEW

I began my review by reviewing the DMRs for May 08 through November 08. This timeframe was chosen because during my previous inspection (conducted in April 08) I reviewed the previous eighteen months of DMRs.

The permit for this facility states in I.A.1. "*During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge dry-dock drainage and noncontact cooling water from outfalls 018 (including 018A and 096), treated steam plant wastewater from outfall 021, and stormwater runoff, demineralized water, steam condensate, saltwater supply system, and potable water from the remaining outfalls.*"

Section I.A.1.a. of the permit states "*Such discharges shall be limited and monitored by the permittee as specified below:*

Discharge Limitations

Outfall Number	*Effluent Unit of Characteristic*	*Monthly Daily Measurement*	*Sampling. Average*	*Maximum*	*Sample Frequency*	*Type*
018, 018A and 96	Flow	MGD	----	------	Wkly	Est
	Oil & Grease	mg/l	10	15	Wkly	Grab
	Copper	mg/l	0.019	0.033	Wkly	Grab
	(Total Recov)	lbs/day	0.44	0.77	Wkly	Grab
	Lead, Mercury Zinc, Copper (Total Recoverable)	mg/l	----	----	Monthly[1]	24 hr comp
	Temperature	F	----	----	Monthly	Grab
	PCBs	mg/L	----	----	Monthly[1]	Grab
	WET	----	----	----	Per Part I.C.	
019	Flow	MGD	----	----	Wkly	Est.
	O & G	mg/L	10	15	Wkly	Grab
	Copper (Total Recov)	mg/l	0.019	0.033	Wkly	Grab
		Lbs/day	0.83	1.44	Wkly	Grab
	Lead, Mercury Zinc, Copper					

	(Total Recoverable)	mg/l	----	----	Monthly[1]	24 hr
	Temperature	F	----	----	Monthly	Grab
	PCBs	mg/L	----	----	Monthly[1]	Grab
	WET	----	----	----	Per Part I.C.	
021	Flow	MGD	0.17		Continuous	Record
	Temp.	F	70 (winter) 75 (summer)	90 (winter) 90 (summer)	Daily	Grab
	Oil & Grease	mg/l Lbs/day	10 14.18	15 21.28	Daily Daily	Grab Grab
	TSS	mg/L Lbs/day	30 42.53	100 141	3/7 days	24 hr Comp.
	Total Residual Chlorine	mg/l	----	0.20	Daily[2]	Grab
	Free Available Chlorine	mg/l	0.20	0.50	Daily[2]	Grab
	Chromium[3] (Total Recoverable)	mg/l	0.20	0.20	Wkly	Grab
	Zinc[3] (Total Recoverable)	mg/l	1.0	1.0	Wkly	Grab
	pH	S.U.	(1)		Daily	Grab

(1) pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored continuously.....

1 Monitoring shall be conducted for one year.

2. Monitoring for these parameters is required only in the event that use of chlorine is resumed.

3 Limitations and monitoring requirements for these parameters apply to wastewater flow from the air compressor cooling tower blowdown and diesel generator cooling tower blowdown before it is co-mingled with other wastestreams.

In June 08 the facility reported two copper exceedences (one daily max and one monthly average violation – both were loading limits violations). In July 08 the facility reported two copper exceedences (2 daily max violations for loading and concentration). In October 08 the facility

reported one spill of approximately one-half gallon of cellulube. In November 08 the facility reported a spill of two gallons of diesel fuel.
The facility is aware that EPA is currently negotiating a Consent Order for violations of the Copper limit. During the first day of my inspection, Kitsap County experienced a significant rainfall event. Stormwater impacts the amount of water on the docks as well as turbidity. Appended to this inspection report as Attachment II are several computer printouts showing how the discharge between bay and sewer is determined during a rainfall event.

I reviewed the bench sheets and analytical data for the DMRs discussed above. The composite sampler temperature record shows a number of instances when the temperature in the composite sampler was outside the 6 degree limit. The lab notes this both in the temperature record book for the composite sampler as well on the Lab Analysis Report. However, the samples are being analyzed anyway and the data submitted as valid. I suggested to Mr. Beckwith that he contact the EPA NPDES Compliance Officer and discuss this issue before continuing the practice. Appended to this inspection report as Attachment III are copies of the Temp Record Book and lab data sheets where it is noted that the sample temperature exceeded the limit.

Section I.E. of the permit states "the permittee shall submit to EPA, Region 10, Water Division, results of future sediment monitoring conducted as required by Washington Department of Ecology, Toxic Cleanup Program and EPA's Superfund Program. Sediment monitoring information available from each preceding calendar year shall be submitted by May 15th, annually.

Mr. Beckwith noted that the sediment report was not submitted by May 15th. The samples were collected in 07 and he is still waiting for the final report.

Section II.C. of the NPDES permit states the BMP Plan shall contain all of the elements of Section II.C.1 a-m.

A copy of the BMP Plan was submitted with the April 08 inspection report. It contained all of the elements listed. Attached as Attachment IV are copies of training records for the facility staff.

Section III states "A storm water pollution prevention plan shall be developed for the entire facility covered by this permit. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit."

As noted in the April 08 inspection report, the facility is still working on addressing issues noted in the internal audit. Appended to this inspection report as Attachment V is the update on the facility's Summary of Findings and Recommendations

In addition, other required measures of the SWPP were provided in hard copy as follows:

Section III.d. of the permit states "In addition to or as part of the comprehensive site evaluation of this permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

The facility conducts a number of inspections to insure environmental compliance. Dry-dock inspections are conducted monthly and docks are also inspected prior to flood (pre-flood inspections). I reviewed the monthly dry dock inspections as well as the pre-flood inspection reports. No discrepancies were noted.

Section III.g of the permit states "The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges not addressed in this permit. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test...."

Mr. Beckwith provided me copies of the Storm Drain Discharge Approvals. No discrepancies were noted. Copies of those documents are appended to this Inspection Report as Attachment VI.

Section III.4 of the permit states "Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once per year...."

This issue was addressed in the April 08 report.

FIELD INSPECTION

Accompanied by Mr. Beckwith, we began a tour of the facility. The Shipyard discharges drainage water from its six dry docks via Outfalls 018, 018A and 019. The discharge consists of ground water, storm water and a ship's non-contact cooling water. The Shipyard's dry-dock drainage system is configured such that, normally, the drainage from Dry Docks 1 through 5 are commingled and discharged from either Outfall 018 or Outfall 18A. Dry Dock 6's drainage system is separate and discharges from outfall 019. The Shipyard has installed Process Water Collection Systems (PWCS) in each of the dry docks to reduce the amount of copper being discharged. The PWCS segregate the runoff from the floors for the dry docks from the

infiltrating ground water. Each PWCS includes a process controller that allows diverting the water from the floor of the dock to either the sanitary sewer or to a treatment system based on the amount of contaminants in the runoff. During periods when the PWCS controllers are not diverting the runoff water, the water combines with the rest of the dry dock drainage and discharges from the outfalls 018, 018A and 019.

Mr. Beckwith explained that each project at each dock has an EHS assigned to oversee and insure that environmental issues are properly addressed and that the shipyard BMPs are adhered to. As part of the facility walk-through, we either drove or walked to all of the dry-dock areas with the exception of Dry Dock 6 which was blocked off due a toxic gas alert. All areas within each dry-dock appeared to be properly maintained. Mr. Beckwith can monitor the turbidity and flow of the PWCS from his desk. If no activity is occurring within the dry-dock the drainage goes directly to the bay. Appended to this inspection report as Attachment II are flow charts showing the discharge during the significant rainfall event during the first day of inspection (Jan. 7th).

We also examined the sample point for outfall 021. The ISCO composite sampler set at this site is in the process of being replaced due to fluctuating temperature problems. At the time of my inspection it contained a thermometer registering 4 C. I noted the temperature fluctuations recorded in the temperature log book for the composite sampler.

We drove over to the lab to review the chain of custody documents for the DMRs and to review the sampling chain of custody for samples collected on site and analyzed by the shipyard lab. According to Mr. Beckwith, the shipyard utilizes its own lab for analysis for all water-related sampling related to the NPDES permit. A review of the labs files found no irregularities or problems with the data. However, I pointed out to Mr. Beckwith that each time the lab had noted on their analyses sheets that the composite sampler's temperature had exceeded the limits set by standard methods, Mr. Beckwith had not requested the sampling be repeated and had instead submitted the data as valid.

Dry-dock six was still unavailable so we returned to the conference room for a short out-briefing. I explained that I would return on Thursday, January 8th to inspect dry-dock 6 and conduct the CFC inspection.

Thursday, January 8, 2009

I returned to the facility and met Mr. Beckwith at 08:30 a.m. I presented my credentials and we drove directly to dry-dock 6. We walked through dry-dock 6 and no issues of concern were noted.

I then returned to the Environmental Building and began the records review for the CFC inspection.

OUTBRIEFING

I thanked all present for their time and efforts during the inspection. I explained that EPA's procedure requires the inspector to submit copies of the inspection reports to the program and that the NPDES permit and compliance programs would determine any permit or compliance issues. Mr. Beckwith requested that a copy of this inspection report be sent to him. I explained that I would notify the NPDES Compliance Unit of his request and note it in my report, but that the Unit had six months from the date my report was received to review the report and make a determination of compliance or non-compliance and that the report usually was not released until the review process was complete. I also noted that Jack Boller was the lead inspector for the multi-media inspection and that he would be in touch with the facility for a closeout briefing (this was confirmed during a telephone conversation with Jack). I thanked all present for their time and left the facility at 14:45 p.m.

ATTACHMENTS

1. General Facility Layout Diagram & Dry-Dock Drainage Diagrams
2. Computer schematic showing discharge based on turbidity
3. Temp. Log book & analytical data noting temp out of compliance
4. Training Records
5. Update on Summary Findings
6. Storm Drainage Approvals
7. Copy of inspector's notes

1-15-09
DATE REPORT SUBMITTED

INSPECTOR'S SIGNATURE